

AMENDMENT 1
TO
THE MEMORANDUM OF UNDERSTANDING
REGARDING
THE COOPERATIVE DEVELOPMENT AND EVALUATION OF
SUPER COCKPIT TECHNOLOGY

BETWEEN

THE MINISTER OF DEFENCE
OF
THE FRENCH REPUBLIC
AND
THE SECRETARY OF DEFENSE
OF
THE UNITED STATES OF AMERICA

Preamble

The Minister of Defence of the French Republic, and the Secretary of Defense of the United States of America:

Having concluded an MOU "regarding the cooperative development and evaluation of Super Cockpit Technology" and a Project Arrangement 1, dated 17 September 1991;

Having noted the progress of the cooperation and desiring to obtain full benefits from their collaborative efforts;

Have reached in accordance with Section 11 of the Super Cockpit MOU, the following understandings:

Article I: Duration

The paragraph 10.5 of the Super Cockpit Technology MOU is amended to read as follows:

"This MOU will expire 9 years from the effective date" (i.e. 17 September 2000).

Article II: MOU Provisions

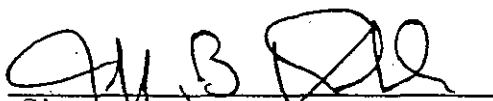
All other provisions of the Super Cockpit Technology MOU and its Project Arrangement I remain unchanged and applicable.

Article III: Language, Entry into Effect

This amendment I, which consists of three (3) articles will enter into effect upon the date of the last signature.

Done in two originals, in each of the French and English languages, both texts being equally valid.

FOR THE SECRETARY OF DEFENSE
OF THE UNITED STATES OF AMERICA


Signature

JEFFREY B. KOHLER, Brig Gen, USAF
Asst Dep Under Sec of the Air Force
International Affairs

Name

Asst Dep Under Sec of the Air Force
International Affairs

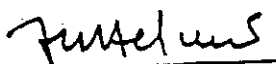
Title

17 SEP 1998

Date

Washington, DC
Location

FOR THE MINISTER OF DEFENCE
OF THE FRENCH REPUBLIC


Signature

Jean-Yves HELMER
Nom

Délégué général pour l'armement
Title

11 SEP. 1998
Date

Paris
Location

MEMORANDUM OF UNDERSTANDING

BETWEEN

THE MINISTER OF DEFENCE OF THE FRENCH REPUBLIC

AND

THE SECRETARY OF DEFENSE OF THE UNITED STATES OF AMERICA

REGARDING

THE COOPERATIVE DEVELOPMENT AND EVALUATION OF

SUPER COCKPIT TECHNOLOGY

17 September 1991

Preamble

Whereas

The Minister of Defence of the French Republic and the Secretary of Defense of the United States of America, (hereinafter referred to as the Participants) are mutually interested in the technology required to develop a virtual crew station (Super Cockpit) for application to a variety of their air force missions. Now, therefore, in order to achieve superior technical results, enhance standardization and interoperability, and to reduce costs by eliminating unnecessary duplication of effort, the Participants intend to share developmental hardware components and information for the purpose of developing and evaluating a virtual crew station, and to this end, have reached the following understandings:

Section 1 - Definitions

1.1. Virtual Image System: Any display system that presents a virtual image (projected) to the aircrew member as contrasted with the real image of a conventional panel mounted display. Virtual image systems may be panel mounted, head mounted, or have their image formulating system situated in other locations within the crew station.

1.2. Helmet Mounted Sight: A system for measuring aircrew head/helmet orientation and position for line of sight and, in turn,

providing signals for driving sensor gimbals, symbology sets and Internetting crew stations.

1.3. Visually Coupled Systems: A combination of a head mounted virtual image system and a helmet mounted sight.

1.4. Super Cockpit or Virtual Crew Station: A combination of virtual image systems, hand/head/eye position orientation sensing and other equipment and software permitting the utilization of the visual, aural and tactile sensory modes of the aircrew member for vehicle control and execution.

1.5. Visually Coupled Airborne Systems Simulator (VCASS): An assembly of hardware and software that permits the emulation of air combat with major elements of the pilot/vehicle interface (displays, controls) composed of visually coupled systems.

1.6. Mini Visually Coupled Airborne Systems Simulator (Mini VCASS): A transportable part task flight simulator utilizing visually coupled systems for the display/control of flight parameters and visual scene emulation.

1.7. Program: The evaluation/development by the Participants of Super Cockpit technology conducted under this Memorandum of Understanding (MOU) which necessitates the transfer of hardware components and information exchange between the Participants.

1.8. Evaluation Reports: Results of the evaluations of the Super Cockpit technology conducted by each Participant will be documented in appropriate technical reports which will be exchanged between the Participants.

1.9. Information: Any information, knowledge or data, including patents, regardless of form or characteristics, including: that of a scientific or technical nature, threat, experimental and test data, designs, improvements, photographs, reports, manuals, specifications, processes, techniques, inventions, technical writings, sound recordings, pictorial reproductions, drawings and other graphical representations; whether on magnetic tape, in computer memory, or in whatever form presented, and whether or not subject to copyright or other legal protection.

1.10. Background Information: Any information or material not generated or conceived under the Program which is necessary to or useful in the Program.

1.11. Foreground Information: Any information or material first generated or conceived under the Program.

1.12. Defense Purposes: The use and/or manufacture by or for the armed forces of a Participant, in any part of the world, including the furnishing of assistance by sales or transfers to non-participating governments or international organizations for mutual defense.

Section 2 - Objective and Scope

2.1. The objective of this MOU is to define and establish the general principles of the Program. Specific projects of work to be conducted under this MOU will be set out in Project Arrangements (PA). Each PA will be consistent with this MOU and will include an objective, duration and description of the project, an identification of the major equipment and software involved, to include a description of the developmental hardware components to be provided by each Participant, and will set out the respective responsibilities and financial contributions of the Participants. PA will require approval at the level of signature of this MOU.

2.2. The scope of this MOU is to undertake joint evaluations and developments of Super Cockpit technology and develop demonstration prototypes of a Super Cockpit.

2.3. It is understood that the extent, if any, to which this MOU may have subsequent phases outside its present scope entailing further collaboration by the Participants will be subject to future determinations by the Participants, and that any subsequent phases or further collaboration would require an additional MOU or amendment to this MOU.

Section 3 - Program Management

3.1. Program management responsibility for the United States is assigned to the United States Air Force (USAF). The Commander, Harry G. Armstrong Aerospace Medical Research Laboratory (AAMRL), Wright-Patterson Air Force Base, Ohio, will designate a USAF Program Manager for each PA to this MOU. The USAF designated Program Manager will be the single point of contact for all matters pertaining to the USAF Program.

3.2. Program management responsibility for France is assigned to the Delege General Pour L'Armement (DGA). The Direction Des Constructions Aeronautiques will designate a DGA Program Manager. The DGA designated Program Manager will be the single point of contact for all matters pertaining to the DGA Program.

3.3. The Program Managers will establish and maintain appropriate channels of communication to ensure a high degree of liaison throughout the Program.

3.4. The Program Managers will meet, correspond and otherwise communicate as frequently as they deem necessary and appropriate, however a formal meeting between the program managers will occur at least annually.

3.5 At the conclusion of the evaluation under each PA, the Participants will exchange Evaluation Reports.

Section 4 - Loan of Developmental Hardware

4.1. For the purpose of carrying out the cooperative research, development, test and evaluation program established by this MOU, each Participant agrees to loan to the other certain materials, supplies, or equipment identified in a PA which are necessary for that project of work. While such loans will be based on the principle of reciprocity, exact item for item exchanges are not required. It is understood that neither Participant will be required to provide materials, supplies, or equipment if such provision would impair the Participant's own priorities, requirements, or commitments, or be inconsistent with its national laws, regulations or other international agreements.

4.2. Materials, supplies, and equipment loaned will be used by the receiving Participant only for the purposes set out in this MOU and its PA.

4.3. Each PA will describe the materials, supplies or equipment to be transferred and how such transfer is necessary for the project of work.

4.4. Materials, supplies, and equipment loaned under this MOU remain the property of the providing Participant and will be returned as set out in the PA. However, it is recognized that the success of any test and evaluation project hereunder may require the expenditure or consumption of loaned materials, supplies, or equipment. In such

cases, the PA will state that the materials, supplies, or equipment are to be expended or consumed and not returned to the providing Participant.

4.5. Each Participant agrees not to assert a claim against the other for injury, loss, or damage resulting from the use of the materials, supplies or equipment loaned by the other Participant.

Section 5 - Financial and Contractual Arrangements

5.1. Each Participant will bear the costs of implementing its part of this Program, subject to the availability of appropriated funds authorized for this purpose. The respective responsibilities of the Participants under each PA will be structured so that the costs borne by each will be approximately equal.

5.2. Each Participant will bear its own administrative costs including, but not limited to: salaries, travel and per diem costs for its personnel, and costs for copying and transporting documents and components to the other Participant.

5.3. In accordance with its laws, regulations and procedures, each Participant will be responsible for placing contracts with industry, and for contract administration, cost and price control, and audit of records, with respect to its activities under this MOU. The Participants will ensure that all contracts placed will contain provisions consistent with this MOU.

Section 6 - Information Transfer and Rights

6.1. The Participants recognize that successful collaboration on this Program will necessitate a full distribution of Foreground Information, and a limited, balanced interchange of Background Information subject to national disclosure policies and the rights of third parties. All information exchanges will be conducted as expeditiously as possible.

6.2. In accordance with its national laws and regulations, each Participant will be free to use at its convenience, and particularly in case of transfer or sale, the Foreground Information that it (or its contractors, subject to the terms of its contracts) will have generated in the course of this Program without using Foreground Information generated by the other Participant (or its contractors).

6.3. Each Participant will have the right to use or have used Foreground Information generated by the other Participant (or its contractors) free of charge for its own Defense Purposes. However, when a Participant proposes to transfer or sell the Foreground Information to a non-participating government or international organization, it must first obtain the approval of the other Participant. A Participant may condition its approval on terms such as a reasonable recoupment of costs from the third party.

6.4. Background Information made available under the Program will be used by the receiving Participant or by any Program contractors

without charge only for purposes of the Program unless the owner of the Background Information approves a different use under such mutually agreed terms and conditions as are necessary. Each Participant will identify to the other Participant whether its Background Information can be made available to the Program contractors. The providing Participant will ensure that Background Information is appropriately marked to assist in providing the desired protection. Each Participant will be responsible for marking such Background Information furnished to the other with a legend indicating the country of origin, the conditions of release, and the fact that the information relates to this MOU and that it is furnished in confidence. Such transfers will be made through the program managers of each country, who will keep a record of the transferred information.

6.5. Exchange of proprietary technical information under this MOU will be subject to the NATO Agreement on the Communication of Technical Information for Defense Purposes, dated 19 October 1970, as amended, to the extent applicable.

Section 7 - Visits

7.1. Upon request, within reasonable limits, each Participant will permit authorized personnel associated with the Program to visit pertinent portions of institutions, offices, and laboratories in its territory in conjunction with efforts under this MOU.

7.2. Such visits will be coordinated in advance with the Program Managers. Once a decision on purposes, visit locations and schedules has been reached, an official visit request will be submitted in accordance with procedures required by the host country. When appropriate authorizations will be approved for recurring visits over the duration of the Program, such authorizations will be subject to annual review.

7.3. Visits will be confined to pertinent portions of Program facilities identified on a case-by-case basis and limited to military, participating contractor, and civilian government employee personnel. These visits should not delay work, and all visiting personnel will be required to comply with pertinent security regulations of host country, including prohibitions on access to sensitive areas and information. Any information disclosed or made available to visitors will be treated as if supplied to the Participant sponsoring the visiting personnel, and will be subject to the above described regulations.

Section 8 - Security

8.1. All classified information and material which may be transferred, communicated or generated in the Program will be safeguarded in accordance with the US/FR General Security of Information Agreement, dated 7 September 1977, and the Industrial Security Procedures between the Secretary of Defense of the United States and French Minister of Defense, dated 21 May 1985.

Section 9 - Customs Duties and Taxes

9.1. Insofar as existing laws and regulations permit, and in any event to the extent provided by applicable international agreements, the Participants will endeavor to ensure that readily identifiable taxes, customs duties and similar charges are not imposed in connection with this Program.

9.2. The Participants will administer all taxes, duties and/or other country charges in the manner most favorable to the satisfactory execution of the arrangements described in this MOU and its PA.

Section 10 - Termination and Withdrawal

10.1 The Participants enter into this MOU and its PA with the full intention of carrying its objectives to conclusion. If however, either Participant considers it necessary to discontinue its participation in the MOU or a PA, it will immediately consult with the other participant to assess the full consequences of such a withdrawal.

10.2 The Participant still wishing to withdraw from the MOU or PA thereto after this consultation shall give written notice of its decision to the other Participant not later than 180 days prior to the effective date of withdrawal.

10.3. The withdrawing Participant will be responsible for any termination or other costs arising from its own contracts undertaken in accordance with Section 5 of this MOU. The remaining Participant will be responsible for any costs resulting from the continuation of work under, or termination of, its own contracts.

10.4. The Participants may terminate this MOU at any time by mutual, written agreement. If the MOU is terminated, then all PA are also terminated at the same time.

10.5. This MOU will expire seven years from the effective date, unless earlier terminated in accordance with the foregoing provision, or extended by mutual written agreement.

10.6. The respective responsibilities of the Participants under Sections 6 and 8 will continue irrespective of the expiration, withdrawal from or termination of this MOU.

Section 11 - Project Arrangements and Amendments

11.1. The PA to this MOU form an integral part hereof. This MOU and its PA may be amended at any time by mutual, written agreement. Amendments will come into effect only when expressed in writing and signed by authorized representatives from both Participants.